Appl. No. 10/665,931
Amdt. dated May 7, 2007
Reply to Office Action of January 26, 2007

PATENT

REMARKS/ARGUMENTS

Claims 1-6 and 819 are pending. Claim 7 has been canceled without prejudice or disclaimer. No new matter has been added.

Claims 1-8 and 9-18 are rejected under 35 U.S.C. §101 for non-statutory subject matter.

Claims 1-19 are rejected under 35 U.S.C. §102(e) as being anticipated by Henry, (U.S. Pat. No. 7,000,227).

Certified Document

A certified copy of the priority document is submitted herewith to perfect Applicant's priority claim.

Section 101 Rejection of claims 1-18

The methods of claim sets 1-3, 4-6 and 8, and 9-18 have been amended to include a step to store the object program on a data store. It is earnestly submitted that the act of storing the object program produces a "real world" tangible result, namely, a data store having an object program. The Section 101 rejections of the claims are believed to be overcome.

Section 102 Rejection

The present invention is directed to generating object programs for computers having a memory hierarchy (the recited "plurality of memory hierarchies"). The specification as originally filed, beginning on page 12, discloses RAM, L1 cache, and L2 cache as illustrative examples of three memory hierarchies. These memories have different performance characteristics; for example, access speed, access latency. The specification teaches that a source program can be compiled to generate object code that is optimized for a specific type of memory so that the resulting executable program will use that specific type of memory for storing data during execution of the program. Accordingly, the claims have been amended to more clearly recited these features of the present invention. The recited method of producing an object program includes detecting a memory designation, and performing optimization based on the detected memory designation.

For example, amended claim 1 recites in part:

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a step for detecting a designation statement designating which memory hierarchy among the plurality of memory hierarchies will serves as the main data store for an object program when the object program is executed;

a step for performing an optimizing process directed to said designated memory hierarchy to produce the object program; and

By comparison, the Henry reference is about optimizing the compiling of a routine. As shown in Fig. 5, the Henry process is an iterative process of compiling and optimizing the routine (520, 525), running it and taking measures of performance (540), and repeating if stopping criteria are not met. Henry does not describe optimizing to produce optimized code for designated memory hierarchy (e.g., RAM memory, L1 cache, etc). Henry optimizes based on performance measurements taken from a previous optimization attempt.
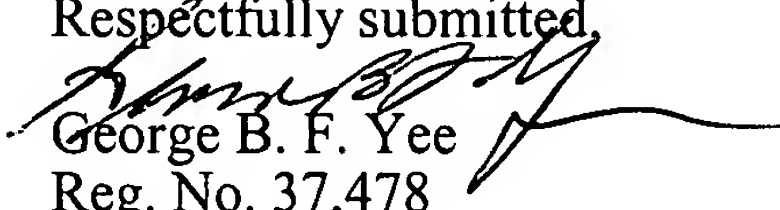
The Henry reference does not teach or even suggest the recited "step for detecting a designation statement designating which memory hierarchy among the plurality of memory hierarchies will serves as the main data store for an object program when the object program is executed" or the recited "step for performing an optimizing process directed to said designated memory hierarchy to produce the object program." For at least this reason, the Section 102 rejection of the claims are believed to be overcome.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

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